

Claim Amendments

1 1. (currently amended) A zoom lens formed of only three lens groups, in order from the object
2 side, as follows:

3 a first lens group having negative refractive power;

4 a second lens group having positive refractive power; and

5 a third lens group having positive refractive power;

6 wherein

7 the first lens group includes, in order from the object side, a negative lens component and
8 a positive lens component;

9 the second lens group includes, in order from the object side, a biconvex lens component
10 and a biconcave lens component that is intimately bonded to said biconvex lens component, a
11 meniscus lens component with its convex lens surface on its object side, and the second lens
12 group further includes a diaphragm for controlling the amount of light that passes through the
13 zoom lens;

14 the third lens group is stationary during zooming and includes a lens component having
15 positive refractive power, and the third lens group moves toward the object side from a reference
16 position during focusing from infinity to a near point;

17 at least one lens component of each of the first and second lens groups includes a lens
18 surface of aspheric shape;

19 the first and the second lens groups are moved so that the first and second lens
20 components groups become closer together and so that the second and third lens components
21 groups become farther apart during zooming from the wide-angle end to the telephoto end;

22 and the following condition is satisfied:

23
$$f_w / | f_{2-f} | < 0.2$$

24 where

25 f_w is the focal length of the zoom lens at the wide-angle end, and

26 f_{2-f} is the focal length of the image-side lens component of the second lens group.

1 2. (original) The zoom lens of claim 1, wherein said biconvex lens component includes a
2 biconvex lens element, said biconcave lens component includes a biconcave lens element, and
3 the following condition is satisfied:

4 $v_3 - v_4 > 14$

5 where

6 v_3 is the Abbe number of said biconvex lens element, and

7 v_4 is the Abbe number of said biconcave lens element.

1 3. (original) The zoom lens of claim 1, wherein the second lens group consists of three lens
2 elements.

1 4. (original) The zoom lens of claim 1, wherein the third lens group consists of a single lens
2 element.

1 5. (original) The zoom lens of claim 3, wherein the third lens group consists of a single lens
2 element.

1 6. (original) The zoom lens of claim 1, wherein the zoom lens consists of five lens components.

1 7. (original) The zoom lens of claim 1, wherein the zoom lens consists of six lens elements.

1 8. (original) The zoom lens of claim 1, wherein said reference position of said third lens group is
2 the position of said third lens group when the zoom lens is retracted.

1 9. (original) The zoom lens of claim 2, wherein said reference position of said third lens group is
2 the position of said third lens group when the zoom lens is retracted.

1 10. (original) The zoom lens of claim 1, wherein said meniscus lens component has negative
2 refractive power.

1 11. (original) The zoom lens of claim 2, wherein said meniscus lens component has negative
2 refractive power.

1 12. (original) The zoom lens of claim 8, wherein said meniscus lens component has negative
2 refractive power.

1 13. (original) The zoom lens of claim 1, wherein said biconcave lens component and said
2 meniscus lens component include planar peripheral portions parallel to one another and
3 perpendicular to the optical axis of the zoom lens that are in contact with each other or are
4 separated by a plane parallel plate.

1 14. (original) The zoom lens of claim 2, wherein said biconcave lens component and said
2 meniscus lens component include planar peripheral portions parallel to one another and
3 perpendicular to the optical axis of the zoom lens that are in contact with each other or are
4 separated by a plane parallel plate.

1 15. (original) The zoom lens of claim 1, wherein said meniscus lens component includes a lens
2 surface of aspheric shape.

1 16. (original) The zoom lens of claim 2, wherein said meniscus lens component includes a lens
2 surface of aspheric shape.

1 17. (original) The zoom lens of claim 8, wherein said meniscus lens component includes a lens
2 surface of aspheric shape.

1 18. (original) The zoom lens of claim 1, wherein said meniscus lens component is made of
2 plastic.

1 19. (original) The zoom lens of claim 2, wherein said meniscus lens component is made of
2 plastic.

1 20. (original) The zoom lens of claim 8, wherein said meniscus lens component is made of
2 plastic.